AMENDMENTS TO THE CLAIMS

1. (currently amended) A catalyst system for olefin polymerization comprising an organic transition metal compound ~~and, as;~~ a cocatalyst~~,~~ comprising an ionic compound made up of anions of the formula (Ia),

$$\left[Al(OR^1)_4 \right]^- \qquad \text{(Ia)}$$

where

the radicals R^1 are ~~identical or different and are each, independently of one another, a radical $R^2R^3(CF_3)_2$,~~ each $C(CF_3)_3$;

~~R^2 is a carbon or silicon atom and~~

~~R^3 is hydrogen, C_1-C_{20}-alkyl, C_1-C_{20}-fluoroalkyl, C_6-C_{20}-aryl, C_6-C_{20}-fluoroaryl, C_7-C_{40}-arylalkyl, C_7-C_{40}-fluoroarylalkyl, C_7-C_{40}-alkylaryl, C_7-C_{40}-fluoroalkylaryl or an SiR^4_3 group, where~~

~~R^4 may be identical or different and is each C_1-C_{20}-alkyl, C_1-C_{20}-fluoroalkyl, C_6-C_{20}-aryl, C_6-C_{20}-fluoroaryl, C_7-C_{40}-arylalkyl, C_7-C_{40}-fluoroarylalkyl, C_7-C_{40}-alkylaryl or C_7-C_{40}-fluoroalkylaryl,~~

and Lewis-acid cations or Brönsted acids as cations.

2. (currently amended) ~~A~~The catalyst system as claimed in claim 1, wherein the cocatalyst comprises, as Lewis-acid cations, cations of the formula (Ib),

$$\left[((M^1)^{a+})Q_1Q_2...Q_z \right]^{d+} \qquad \text{(Ib)}$$

where

M^1 is an element of groups 1 to 16 of the Periodic Table of the Elements,

Q_1 to Q_z are singly negatively charged groups ~~such as~~comprising C_1-C_{28}-alkyl, C_6-C_{15}-aryl, alkylaryl, arylalkyl, haloalkyl, haloaryl each having from 6 to 20 carbon atoms in the aryl radical and from 1 to 28 carbon atoms in the alkyl radical, C_3-C_{10}-cycloalkyl which may bear C_1-C_{10}-alkyl groups as substituents, halogen, C_1-C_{28}-alkoxy, C_6-C_{15}-aryloxy, silyl or mercaptyl groups~~;~~;

a is an integer from 1 to 6~~ and~~;

z is an integer from 0 to 5~~;~~; and

d corresponds to the difference a-z, but d is greater than or equal to 1.

3. (currently amended) ~~A~~The catalyst system as claimed in claim 1, wherein the cocatalyst comprises, as cations, Brönsted acids of the formula (Ic)~~;~~;

$$\left[AR^5_2H \right]^+ \qquad \text{(Ic)}$$

where

A is an element of group 15 of the Periodic Table of the Elements and

R^5 may be identical or different and is each, independently of one another, C_1-C_{20}-alkyl, C_1-C_{20}-haloalkyl, C_1-C_{10}-alkoxyl C_6-C_{20}-aryl, C_6-C_{20}-haloaryl, C_6-C_{20}-aryloxy, C_7-C_{40}-arylalkyl, C_7-C_{40}-haloarylalkyl, C_7-C_{40}-alkylaryl or C_7-C_{40}-haloalkylaryl.

4. (canceled).

5. (currently amended) ~~A~~The catalyst system as claimed in ~~any of claims 1 to 4~~claim 1 which further comprises an organometallic compound.

6. (currently amended) ~~A~~The catalyst system as claimed in ~~any of claims 1 to 5~~claim 1 which further comprises an inorganic or organic support.

7. (currently amended) A process for preparing a catalyst system ~~as claimed in claim 6, which comprises~~comprising:

an organic transition metal compound; a cocatalyst comprising an ionic compound made up of anions of the formula (Ia):

$$\left[Al(OR^1)_4 \right]^- \qquad \text{(Ia)}$$

where the radicals R^1 are each $C(CF_3)_3$;

Lewis-acid cations or Brönsted acids as cations; and

an inorganic or organic support; the process comprising:

firstly bringing the support into contact with an organometallic compound and adding the organic transition metal compound and the cocatalyst to ~~the~~a reaction product.

8. (currently amended) A catalyst system for the polymerization of olefins comprising:

an organic transition metal compound; a cocatalyst comprising an ionic compound made up of anions of the formula (Ia):

$$\left[Al(OR^1)_4 \right]^- \qquad \text{(Ia)}$$

where

the radicals R^1 are each $C(CF_3)_3$;

Lewis-acid cations or Brönsted acids as cations; and

an inorganic or organic support

which is ~~obtainable~~obtained ~~as set forth in claim 7~~by a process comprising firstly bringing the support into contact with an organometallic compound and adding the organic transition metal compound and the cocatalyst to a reaction product .

9. (currently amended) A process ~~for the polymerization of olefins~~comprising polymerizing olefins with ~~in which~~ a catalyst system ~~as set forth in any of claims 1 to 8 is used~~comprising:

an organic transition metal compound; a cocatalyst comprising an ionic compound made up of anions of the formula (Ia):

$$\left[Al(OR^1)_4 \right]^- \qquad \text{(Ia)}$$

where the radicals R^1 are each $C(CF_3)_3$; and

Lewis-acid cations or Brönsted acids as cations.